U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT

Docket Number	
10434/60701	

Application Number	Filing Date	Examiner	Art Unit
10/693,091	October 23, 2003	NOGUEROLA, Alexander Stephan	1753

Invention Title	Inventor(s)
METHOD FOR CONTINUOUS PARTICLE SEPARATION USING OBSTACLE ARRAYS ASYMMETRICALLY ALIGNED TO FIELDS	HUANG et al.

Address to:

Mail Stop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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Date: 5/3/05

Signature: Alan P. Force
Alan P. Force (Reg. No. 39,673)

1. In accordance with the duty of disclosure under 37 C.F.R. § 1.56 and in conformance with the procedures of 37 C.F.R. §§ 1.97 and 1.98 and M.P.E.P. § 609, attorneys for Applicants hereby bring the following references to the attention of the Examiner. The references are listed on the attached modified PTO Form No. 1449. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

2. The filing of this Information Disclosure Statement and the attached PTO Form No. 1449, shall not be construed as an admission that the information cited is prior art, or is considered to be material to patentability as defined in 37 C.F.R. § 1.56(b).

3. Since the U.S. Patent and Trademark Office has waived the requirement under 37 C.F.R. §1.98 (a)(2)(i) to submit a copy of each cited U.S. Patent and each U.S. patent application publication for all U.S. national patent applications filed after June 30, 2003, copies of the U.S. patents and U.S. patent application publications listed on the modified PTO Form No. 1449 are not enclosed.

4 It is believed that no fees are due in connection with this Information Disclosure Statement. However, should any fees be due, the Commissioner is authorized to charge Deposit Account No. 11-0600 for such fees. A duplicate copy of this communication is enclosed for charging purposes.

Dated: 5/3/05

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT	DOCKET NO. **10434/60701**	SERIAL NO. **10/693,091**
	APPLICANT **HUANG et al.**	
	FILING DATE **October 23, 2003**	GROUP **1753**

U. S. PATENT DOCUMENTS

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS	SUBCLASS	FILING DATE*
	5,427,663	June 27, 1995	Austin et al.			

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

OTHER DOCUMENTS

EXAMINER INITIAL		AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.
		J. C. Giddings, Unified Separation Science (Wiley, New York, 1991) .
		J. C. Giddings, " 'Eddy' Diffusion in Chromatography", *Nature* 184, pp. 357-358 (August 1, 1959).
		C.F. Chou, et. al., "Sorting by diffusion: An asymmetric obstacle course for continuous molecular separation", *Proc. Natl. Acad. Sci.*, Vol. 96, No. 24, pp. 13762-13765 (November 23, 1999).
		J. Han, et al. "Separation of Long DNA Molecules in a Microfabricated Entropic Trap Array", *Science* Volume 288, pp. 1026-1029 (May 12, 2000).
		J. C. Giddings, "Field-Flow Fractionation: Analysis of Macromolecular, Colloidal, and Particulate Materials", *Science*, Volume 260, pp. 1456-1465 (June 4, 1993).
		S.W.P. Turner, et al., "Confinement-induced entropic recoil of single DNA molecules in a nanofluidic structure", *Phys Rev Lett.*, Volume 88, Number 12, pp. 128103-1 - 128103-4, March 25, 2002.
		L.R. Huang, et al. "A DNA prism for high-speed continuous fractionation of large DNA molecules", *Nat Biotechnol*, Volume 20, No. 10, pp. 1048-1051, October 2002.
		L.R. Huang, et al., "Role of molecular size in ratchet fractionation", *Phys. Rev. Lett.*, Volume 89, Number 17, pp. 178301-1 – 178301-4 (October 21, 2002).
		N. W. Ashcroft and N. D. Mermin, *Solid State Physics* (Saunders College Publishing) Fort Worth, 1976.
		E. W. Becker et. al., "Fabrication of microstructures with hight aspect ratios and great structural heights by synchrotron radiation lithography, galvanoforming, and plastic moulding (LIGA process)", Microelectronic Engineering, Volume 4, Number 1, pp. 35-56, May 1986.
		H. Becker et. al., "Planar quartz chips with submicron channels for two-dimensional capillary electrophoresis applications", J. Micromech. Microeng., Volume 8, Number 1, pp. 24-28, March 1998.
		H. C. Berg, *Random Walks in Biology*, Princeton University Press, New Jersey, 1993, p. 56.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.